# Gulf of Mexico Harmful Algal Bloom Bulletin

22 October 2007

NOAA Ocean Service

NOAA Satellites and Information Service

Last bulletin: October 19, 2007

## Conditions Report

NE Florida: A harmful algal bloom has been identified from Duval to central Volusia County. Patchy moderate impacts are possible for Duval and northern Volusia Counties today through Thursday. Patchy high impacts are possible for St. Johns and Flagler Counties today through Thursday.

SW Florida: Harmful algae has been identified in southern Lee and northern Collier Counties. No impacts are expected; however, patchy very low impacts are possible today through Wednesday.

## Analysis

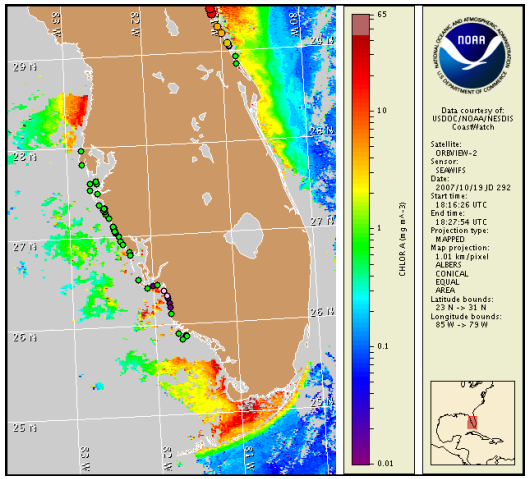
**NE Florida:** A harmful algal bloom persists from Duval to central Volusia County along Florida's northeastern coast. Recent sampling results (FWRI; 10/19) indicate that the bloom has intensified along Flagler and Volusia Counties, with concentrations increasing from medium (10/12) to high (10/19) in Flagler and concentrations increasing from low (10/12) to medium (10/19) in Volusia County. High concentrations remain alongshore from St. Augustine Inlet in St. Johns County to Gamble Rogers State Park in Flagler County. Continued sampling indicates that the bloom is currently not present in Brevard County (FWRI; 10/17). Satellite imagery from 10/19 illustrates two patches of elevated chlorophyll from 30°30'7"N, 81°10'53"W to 30°17'8"N, 81°12' 23"W along its north-south axis (Duval County) and from 30°8'2"N, 81°10'8"W to 29°20'18"N, 80°53'39"W along its north-south axis (St.Johns to Flager County). Continued sampling is recommended. Variable easterly winds throughout the week may increase the potential for coastal impacts.

**SW Florida:** Harmful algae was recently identified in Lee and Collier counties (FWRI; 10/17-18). Concentrations onshore range from present to 'very low a' from Sanibel Island (Lee County) to Clam Pass (Collier County). Harmful algae is currently not present alongshore from Pinellas to Charlotte County (FWRI; 10/19); however, *K.brevis* has been identified offshore. Offshore concentrations range from present to 'very low a' from Pinellas to Lee County, while concentrations range from low to high offshore Collier County. Recent imagery has been obscured by clouds; however, imagery from 10/19 indicates that elevated chlorophyll is present offshore Collier County with a central location of 26°9'2"N, 82°8'34"W which corresponds with recent sampling results (FWRI; 10/19).

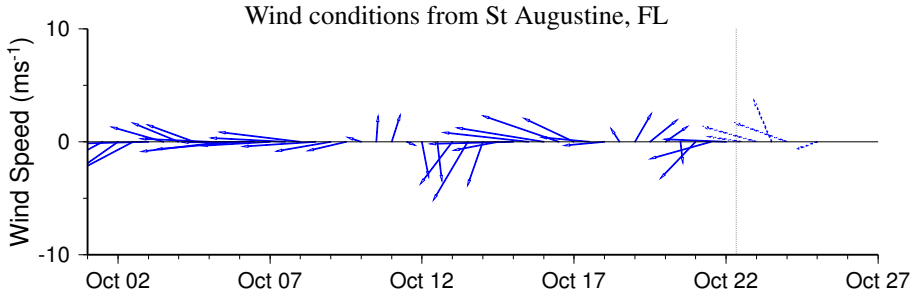


Continued sampling is recommended. There have been no recent reports of fish kills or respiratory irritation along southwest Florida. Southeasterly winds today and Tuesday will minimize impacts along the coast.

~Keller, Fenstermacher



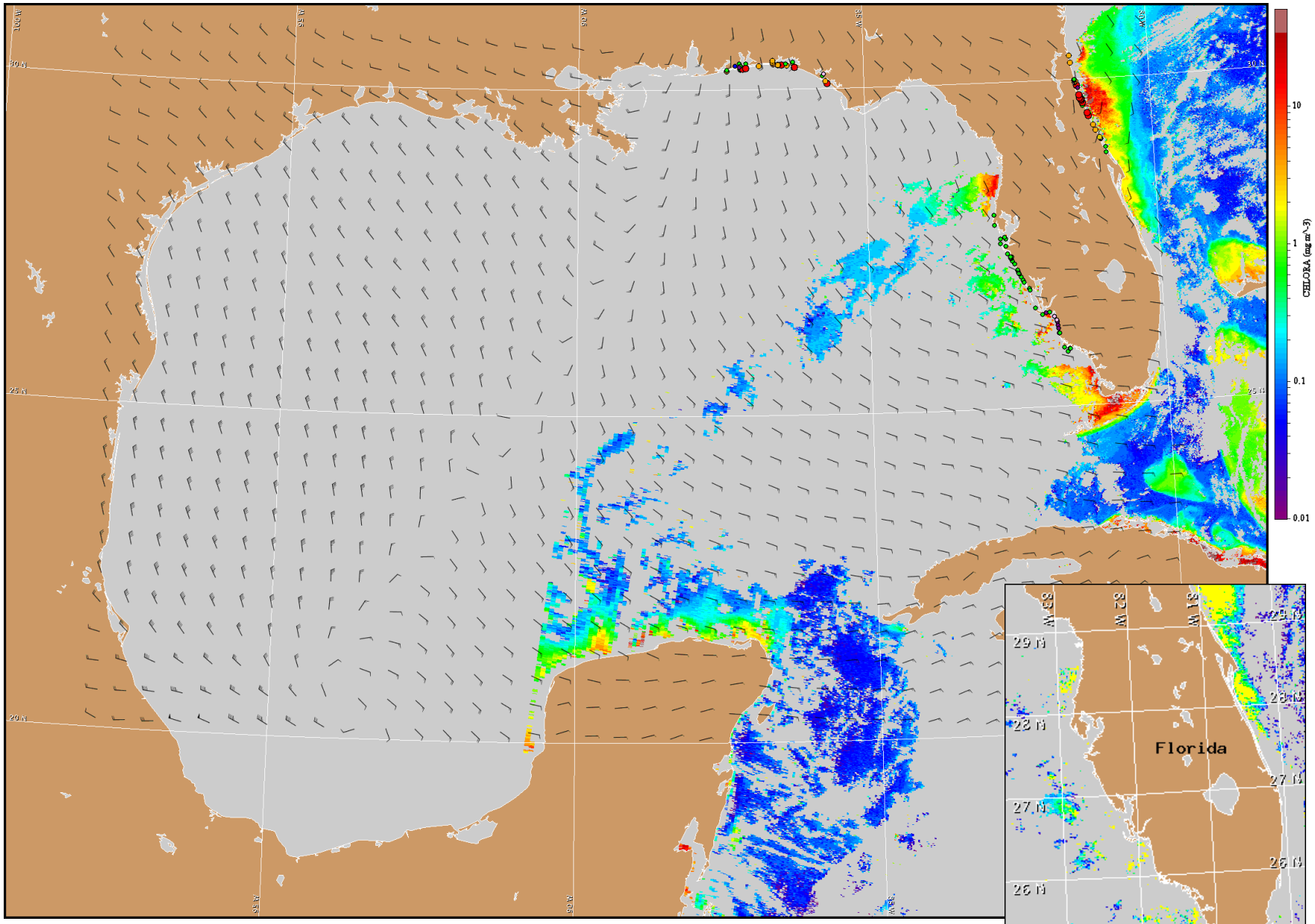
Satellite chlorophyll image with possible HAB areas shown by red polygon(s). Cell concentration sampling data from October 14 to 18 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide:
http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf




Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

NE Florida: Easterly to southeasterly winds today and Tuesday, becoming southerly on Tuesday night (10-15 knots; 5-8 m/s). Southeasterly to easterly winds on Wednesday, with northeasterly winds on Thursday (10-15 knots; 5-8 m/s)

SW Florida: Southeasterly winds today followed by southerly and southeasterly winds on Tuesday (5-10 knots; 3-5 m/s). Southerly winds on Wednesday, with northeasterly winds Wednesday night and Thursday (5-15 knots; 3-8m/s).

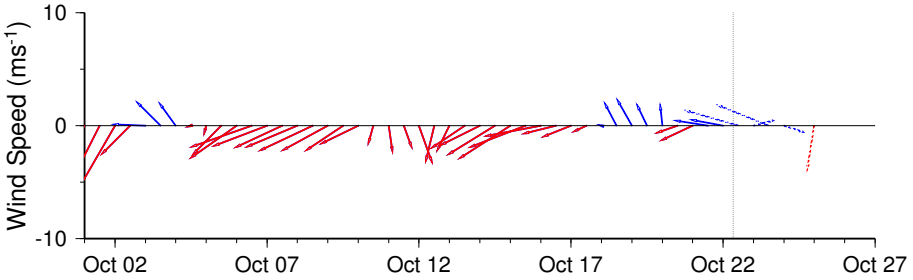



Satellite chlorophyll image and forecast winds for October 23, 2007 12Z with Cell concentration sampling data from October 14 to 18 shown as red (high), orange (medium), yellow (low b), brown (low a), blue(very low b), purple (very low a), pink (present), and green (not present). For a list of cell count data providers and a key to the cell concentration categories, please see the HABFS bulletin guide: http://www.csc.noaa.gov/crs/habf/habfs_bulletin_guide.pdf




Verifi ed and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).

Wind conditions from Venice Pier, FL




Wind conditions from Naples, FL